Applicant: Malte Kumkar et al. Attorney's Docket No.: 15540-020US1 / 25 216 RK/nu:

Trumpf 18.00201, DS07549

Serial No.: 10/765,051

: January 28, 2004 Filed

Page : 2 of 10

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

<u>Listing of Claims</u>:

An apparatus for optically pumping a laser-active solid 1. (Currently amended) body with pumping light coupled into the solid body through an end surface of the solid body,

the apparatus comprising:

a laser-active solid body including an end surface though which pumping light is coupled

into the solid body and a lateral surface through which pumping light exits the solid body;

a reflector surrounding the laser-active solid body at a distance from the lateral surface of

the solid body for reflecting light that exists the solid body back towards the solid body, thereby

forming an annular gap between the solid body and the reflector; and

a surface for diffusing light that is coupled into the solid body through the end surface of

the solid body and that exits the solid body through the lateral surface, wherein the surface is

selected from the group consisting of the lateral surface and a surface of the reflector.

2. (Original) The apparatus of claim 1, wherein the surface for diffusing light is the

lateral surface.

3. (Original) The apparatus of claim 2, wherein the reflector has a surface that diffusely

reflects the exiting pumping light.

4. (Original) The apparatus of claim 2, wherein the reflector has a mirror-like reflecting

smooth surface for reflecting the exiting pumping light.

5. (Original) The apparatus of claim 1, wherein the surface for diffusing light is the

surface of the reflector.

Applicant: Malte Kumkar et al. Attorney's Docket No.: 15540-020US1 / 25 216 RK/nu; Trumpf 18.00201, DS07549

Serial No.: 10/765,051 Filed : January 28, 2004

Page : 3 of 10

6. (Original) The apparatus of claim 5, wherein the lateral surface of the solid body also has a surface that diffuses the exiting pumping light.

- 7. (Original) The apparatus of claim 5, wherein the lateral surface of the solid body has a mirror-like smooth surface.
- 8. (Original) The apparatus of claim 1, further comprising a medium disposed on the outside of the lateral surface having a higher refractive index than the solid body.
- 9. (Original) The apparatus of claim 8, wherein the medium is disposed in the form a layer on the lateral surface.
- 10. (Original) The apparatus of claim 8, wherein the reflector has a surface that diffusely reflects exiting pumping light.
- 11. (Currently amended) The apparatus of claim 1, wherein a cooling medium flows through [[a]] the gap between the solid body and the reflector.
 - 12. (Original) The apparatus of claim 11, wherein the cooling medium is water.
- 13. (Original) The apparatus of claim 1, wherein at least 3% of the pumping light coupled into the solid body though the end surface is diffusely distributed in the solid body.
- 14. (Original) The apparatus of claim 1, wherein at least 20% of the pumping light coupled into the solid body though the front side is diffusely distributed in the solid body.

Applicant: Malte Kumkar et al. Attorney's Docket No.: 15540-020US1 / 25 216 RK/nu; Trumpf 18.00201, DS07549

Serial No.: 10/765,051 Filed : January 28, 2004

Page : 4 of 10

15. (Original) The apparatus of claim 1, wherein at least 40% of the pumping light coupled into the solid body though the front side is diffusely distributed in the solid body.